Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. – 12. **(canceled)**

13. **(currently amended)** A method for assigning quantization parameters to ~~the~~ groups of blocks of a picture comprising the steps of:

~~i.~~ (a) setting the quantization parameters of all groups of blocks of the picture equal to the largest value allowed by the video coding standard;

~~ii.~~ (b) scanning said groups of blocks according to a certain scanning order, where the last group of blocks in the scanning order is followed by the first group of blocks;

~~iii.~~ (c) determining whether to code the next group of blocks in the said scanning order with the quantization parameter for the group of blocks;

~~iv.~~ (d) decrementing the quantization parameter of said group of blocks;

~~v.~~ (e) repeating steps (b)-(d) until the sum of the estimates for the number of coding bits of all of said groups of blocks exceeds the targeted number of coding bits, B^{TR}, for the picture.

14. **(original)** The method of claim 13, wherein the first, Z_o, of a number Z of groups of blocks are quantized with a quantization parameter of q, and the remaining number, $Z - Z_o$,of groups of blocks are quantized with a quantization parameter of $q+1$.

15. **(original)** The method of claim 13, wherein a group of blocks is coded if the following inequality is satisfied:

$$\frac{1}{384}\sum_{j\in\{1,\ldots,6\}}\sum_{(x,y)\in\mathcal{E}_j^k}|I^{FD}(x,y)|^{k}\geq h(q)$$

16. **(original)** The method of claim 13, wherein said repeating step is terminated according to the following equation:

$$\sum_{r\in\{kZ+1,\ldots,(k+1)Z\}} U^r(c^r,q^r)+\hat{B}^r_{OV}(q^r)>B^{TR}$$

17. – 23. **(canceled)**

24. **(currently amended)** A method for assigning quantization parameters to ~~the~~ groups of blocks of a picture comprising the steps of:

(a) setting the quantization parameters of all groups of blocks of the picture equal to the smallest value allowed by the video coding standard;

(b) scanning said groups of blocks according to a certain scanning order, where the last group of blocks in the scanning order is followed by the first group of blocks;

(c) determining whether to code the next group of blocks in the said scanning order with the quantization parameter for the group of blocks;

(d) incrementing the quantization parameter of said group of blocks;

(e) repeating steps (b)-(d) until the sum of the estimates for the number of coding bits of all of said groups of blocks falls below the targeted number of coding bits, B^{TR}, for the picture.

25. **(original)** The method of claim 24, wherein the first, Z_o, of a number Z of groups of blocks are quantized with a quantization parameter of *q*, and the remaining number, $Z- Z_o$,of groups of blocks are quantized with a quantization parameter of $q—1$.

26. **(original)** The method of claim 24, wherein a group of blocks is coded if the following inequality is satisfied:

$$\frac{1}{384}\sum_{j\in\{1,\ldots,6\}}\sum_{(x,y)\in g_j^k}|I^{FD}(x,y)|^{\mu}\geq h(q)$$

27. **(original)** The method of claim 24, wherein said repeating step is terminated according to the following equation:

$$\sum_{r\in\{kZ+1,\ldots,(k+1)Z\}}U^r(c^r,q^r)+\hat{B}_{OV}^r(q^r)<B^{TR}$$

28. **(new)** The method of claim 14, wherein a group of blocks is coded if the following inequality is satisfied:

$$\frac{1}{384}\sum_{j\in\{1,\ldots,6\}}\sum_{(x,y)\in g_j^k}|I^{FD}(x,y)|^{\mu}\geq h(q)$$

29. **(new)** The method of claim 14, wherein said repeating step is terminated according to the following equation:

$$\sum_{r\in\{kZ+1,\ldots,(k+1)Z\}}U^r(c^r,q^r)+\hat{B}_{OV}^r(q^r)>B^{TR}$$

30. **(new)** The method of claim 15, wherein said repeating step is terminated according to the following equation:

$$\sum_{r\in\{kZ+1,\ldots,(k+1)Z\}} U^r(c^r,q^r)+\hat{B}^r_{OV}(q^r)>B^{TR}$$

31. **(new)** The method of claim 30, wherein the first, Z_o, of a number Z of groups of blocks are quantized with a quantization parameter of *q*, and the remaining number, Z-Z_o ,of groups of blocks are quantized with a quantization parameter of *q*+1.

32. **(new)** The method of claim 25, wherein a group of blocks is coded if the following inequality is satisfied:

$$\frac{1}{384}\sum_{j\in\{1,\ldots,6\}}\sum_{(x,y)\in g_j^p}|I^{FD}(x,y)|^L\geq h(q)$$

33. **(new)** The method of claim 25, wherein said repeating step is terminated according to the following equation:

$$\sum_{r\in\{kZ+1,\ldots,(k+1)Z\}} U^r(c^r,q^r)+\hat{B}^r_{OV}(q^r)>B^{TR}$$

34. **(new)** The method of claim 26, wherein said repeating step is terminated according to the following equation:

$$\sum_{r\in\{kZ+1,\ldots,(k+1)Z\}} U^r(c^r,q^r)+\hat{B}^r_{OV}(q^r)>B^{TR}$$

35. **(new)** The method of claim 34, wherein the first, Z_o, of a number Z of groups of blocks are quantized with a quantization parameter of *q*, and the remaining number, $Z-Z_o$,of groups of blocks are quantized with a quantization parameter of $q+1$.

36. **(new)** The method of claim 13, wherein a decision to code a group of blocks is made by comparing a feature derived from data of a macroblock against a threshold.

37. **(new)** The method of claim 36, wherein the feature is an error variance of one or both of a luminance value or a chrominanace value of the macroblock.

38. **(new)** The method of claim 24, wherein a decision to code a group of blocks is made by comparing a feature derived from data of a macroblock against a threshold.

39. **(new)** The method of claim 38, wherein the feature is an error variance of one or both of a luminance value or a chrominanace value of the macroblock.